

Claims

1. A method for forming a ferrocapacitor includes the steps of:
 - depositing a ferroelectric material over an insulating layer;
 - a first etching step of etching of the ferroelectric material to form 5 openings in it,
 - depositing an electrode layer into the openings formed in the ferroelectric layer;
 - a second etching step, after depositing the electrode layer, of etching the insulating layer at the bottom of the openings to form gaps in it; and
- 10 inserting conductive material into the gaps.
2. A method according to claim 1 in which the first etching step leaves a film of ferroelectric material remaining at the bottom of the openings, and the film of ferroelectric material is removed during the second etching step.
3. A method according to claim 1 including a step of planarizing the top of 15 the remaining ferroelectric material to a planarization level and depositing an insulating layer over it.
4. A method according to claim 1 in which the conductive material substantially fills the openings at least up to the planarization level.
5. A ferroelectric capacitor produced by a method according to claim 1.
- 20 6. A FeRAM device including a ferrocapacitor produced by a method according to claim 1.